

IN THE CLAIMS

Applicant has submitted a new complete claim set showing marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts.

Please amend claims as shown below:

1. (Currently Amended) Oscillator circuitry comprising:

a capacitor;

capacitor charging means arranged to supply a current to charge the capacitor to a first predetermined threshold voltage;

capacitor discharging means arranged to discharge the capacitor to a second predetermined threshold voltage; and

switching means arranged to switch between a capacitor discharging ~~mode~~ mode and a capacitor charging mode responsive to reaching at least one of said threshold voltages, wherein the at least one threshold voltage is determined by a threshold setting means which provides a voltage threshold which varies to compensate for changes in temperature by varying a voltage difference between said first predetermined threshold voltage and said second predetermined threshold voltage.

2. (Original) Circuitry as claimed in claim 1, wherein the threshold setting means comprises a current source and a resistive means which varies in resistance in dependence upon temperature.

3. (Original) Circuitry as claimed in claim 1, wherein the switching means comprises a comparator arranged to monitor voltage across the capacitor and to trigger a change between the discharging and charging modes.

4. (Original) Circuitry as claimed in claim 3, wherein the comparator is connected to a first control transistor which sets the first and second predetermined threshold voltages of the capacitor.

5. (Original) Circuitry as claimed in claim 4, wherein the first control transistor is arranged to selectively by-pass an element of a resistive chain.

6. (Original) Circuitry as claimed in claim 3, wherein the comparator is connected to a second control transistor which controls current flow to facilitate charging and discharging of the capacitor means.



7. (Original) Circuitry as claimed in claim 2, wherein the resistive means comprises one or more diode connected transistors.


8. (Original) Circuitry as claimed in claim 1, wherein the capacitor charging means comprises a current source.

9. (Original) Circuitry as claimed in claim 1, wherein the capacitor discharging means comprises a current source.

10. (Currently amended) Oscillator circuitry comprising:
a capacitor;
a capacitor charger arranged to supply a current to charge the capacitor to a first predetermined threshold voltage;
a capacitor discharger arranged to discharge the capacitor to a second predetermined threshold voltage; and
a switch arranged to switch between a capacitor discharging mode and a capacitor charging mode responsive to reaching at least one of said threshold voltages, wherein the at least one threshold voltage is determined by a threshold setting means which provides a voltage

threshold which varies to compensate for changes in temperature by varying a voltage difference between said first predetermined threshold voltage and said second predetermined threshold voltage.

 Please add new claims 11-31 as shown below: 

 11. (New) The oscillator circuitry of claim 1, wherein only said first predetermined threshold voltage varies with temperature.

12. (New) The oscillator circuitry of claim 1, wherein only said second predetermined threshold voltage varies with temperature.

13. (New) The oscillator circuitry of claim 1, wherein a charge and discharge frequency of the capacitor is independent of temperature.

14. (New) The oscillator circuitry of claim 3, wherein a comparator output frequency is independent of temperature.

15. (New) The oscillator circuitry of claim 10, wherein the threshold setting means comprises a current source and a resistive means which varies in resistance in dependence upon temperature.

16. (New) The oscillator circuitry of claim 10, wherein the switch comprises a comparator arranged to monitor voltage across the capacitor and to trigger a change between the discharging and charging modes.

17. (New) The oscillator circuitry of claim 16, wherein the comparator is connected to a first control transistor which sets the first and second predetermined threshold voltages of the capacitor.

18. (New) The oscillator circuitry of claim 17, wherein the first control transistor is arranged to selectively by-pass an element of a resistive chain.

19. (New) The oscillator circuitry of claim 16, wherein the comparator is connected to a second control transistor which controls current flow to facilitate charging and discharging of the capacitor.

20. (New) The oscillator circuitry of claim 15, wherein the resistive means comprises one or more diode connected transistors.

21. (New) The oscillator circuitry of claim 10, wherein the capacitor charger comprises a current source.

22. (New) The oscillator circuitry of claim 10, wherein the capacitor discharger comprises a current source.

23. (New) The oscillator circuitry of claim 10, wherein only said first threshold voltage varies with temperature.

24. (New) The oscillator circuitry of claim 10, wherein only said second threshold voltage varies with temperature.

25. (New) The oscillator circuitry of claim 10, wherein a charge and discharge frequency of the capacitor is independent of temperature.

26. (New) The oscillator circuitry of claim 16, wherein a comparator output frequency does not vary with temperature.

27. (New) A method of providing an oscillating voltage signal, the method comprising the acts of:

increasing a voltage signal until the voltage signal reaches a first threshold voltage;

decreasing the voltage signal until the voltage signal reaches a second threshold voltage;

and

varying a difference between the first threshold voltage and the second threshold voltage in response to changes in temperature.

28. (New) The method of claim 27, wherein the act of increasing the voltage signal includes an act of increasing the voltage signal at a rate that varies with temperature.

29. (New) The method of claim 27, wherein the act of decreasing the voltage signal includes an act of decreasing the voltage signal at a rate that varies with temperature.

30. (New) The method of claim 27, wherein the act of increasing the voltage signal includes an act of charging a capacitor.

31. (New) The method of claim 27, wherein the act of decreasing the voltage signal includes an act of discharging a capacitor.
